

Title (en)  
OPTICAL FIBRE ARRAY WITH HIGH RELIABILITY

Title (de)  
GLASFASERANORDNUNG MIT HOHER ZUVERLÄSSIGKEIT

Title (fr)  
RÉSEAU DE FIBRES OPTIQUES À HAUTE FIABILITÉ

Publication  
**EP 3534195 A4 20200617 (EN)**

Application  
**EP 17864089 A 20171026**

Priority  
• CN 201621180658 U 20161027  
• CN 2017107799 W 20171026

Abstract (en)  
[origin: EP3534195A1] An optical fiber array with a high reliability, relating to the technical field of optical fibers. The optical fiber array is composed of an optical fiber positioning substrate (1), a cover plate (2) and an optical fiber ribbon (3). A stripped end of the optical fiber ribbon (3) is a naked fiber (4). The naked fiber (4) is pressed, by the cover plate (2), in a microgroove array of the optical fiber positioning substrate (1) and is spliced by a glue layer (5) to be fixed. A transition region between the stripped portion and an unstripped portion of the optical fiber ribbon (3) is spliced by the glue layer (5) to be fixed at the second half portion of the optical fiber positioning substrate (1). The structural design of the optical fiber array is reasonable and novel. By roughening the surfaces of the positioning substrate (1) and the cover plate (2) spliced with glue, the splicing area between the glue and the optical fiber positioning substrate (1), cover plate (2) and optical fiber ribbon (3) is increased to improve the splicing strength, so that the optical fiber array can work in an atrocious environment of high temperature and high humidity without the adhesive failure, ensuring the positioning precision of the optical fiber.

IPC 8 full level  
**G02B 6/36** (2006.01)

CPC (source: EP US)  
**G02B 6/36** (2013.01 - US); **G02B 6/3616** (2013.01 - US); **G02B 6/3636** (2013.01 - EP); **G02B 6/3644** (2013.01 - US); **G02B 6/3652** (2013.01 - EP); **G02B 6/4403** (2013.01 - US); **G02B 6/448** (2013.01 - US); **G02B 6/3861** (2013.01 - EP)

Citation (search report)  
• [X] US 7587108 B2 20090908 - CARPENTER BARRY S [US], et al  
• [X] CN 203324505 U 20131204 - SHANGHAI CREATE OPTOELECTRONIC TECHNOLOGY CO LTD  
• [X] US 2003081926 A1 20030501 - JEONG BYUNG-GIL [KR], et al  
• [X] EP 0926522 A2 19990630 - NGK INSULATORS LTD [JP], et al  
• See references of WO 2018077211A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3534195 A1 20190904; EP 3534195 A4 20200617**; CN 206114965 U 20170419; US 10718908 B2 20200721; US 2019243071 A1 20190808; WO 2018077211 A1 20180503

DOCDB simple family (application)  
**EP 17864089 A 20171026**; CN 201621180658 U 20161027; CN 2017107799 W 20171026; US 201716310823 A 20171026